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PROCUREMENT SECTION
CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR IDAHO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

IDAHO STATE DEPARTMENT OF WATER ADMINISTRATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
FEB. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
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|||||
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BOISE, IDAHO

In Cooperation with

R. KEITH HIGGINSON
DIRECTOR
DEPARTMENT OF WATER ADMINISTRATION

|||||
Report prepared by

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WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR FEBRUARY 1, 1972

Snowfall thus far in the 1971-72 season has been well above normal throughout Idaho. As of February 1, 69 snow courses in the state measured snow-water equivalent equal to or exceeding the April 1 average. April 1 is, in practically all cases, the maximum accumulation for the winter season. Thirty-four courses recorded new records for February 1. Snowpack water content varies from a low of 120% of average on the Little Wood drainage to a high of 245% of normal on the Raft River-Goose Creek watersheds.

Valley precipitation for the period November 1971 through January 1972 has been above normal for all divisions of the state.

Soil moisture ranges from near normal to above average on all major drainages. Soils are not frozen beneath the snowpack except in isolated instances.

In general, carryover reservoir storage remains high in relation to normal; however, many reservoirs are now being lowered in anticipation of above normal runoff during the melt season.

Streamflow forecasts at key gaging stations for the April-September period range from 124% of average for the Kootenai River at Leonia to 150% of normal for the Inflow to Magic Reservoir on the Big Wood drainage and the Boise River near Boise. Inflow to Lake Owyhee on the Owyhee River is forecast at 233% of average. Prospect for water supply is good to excellent throughout the state.

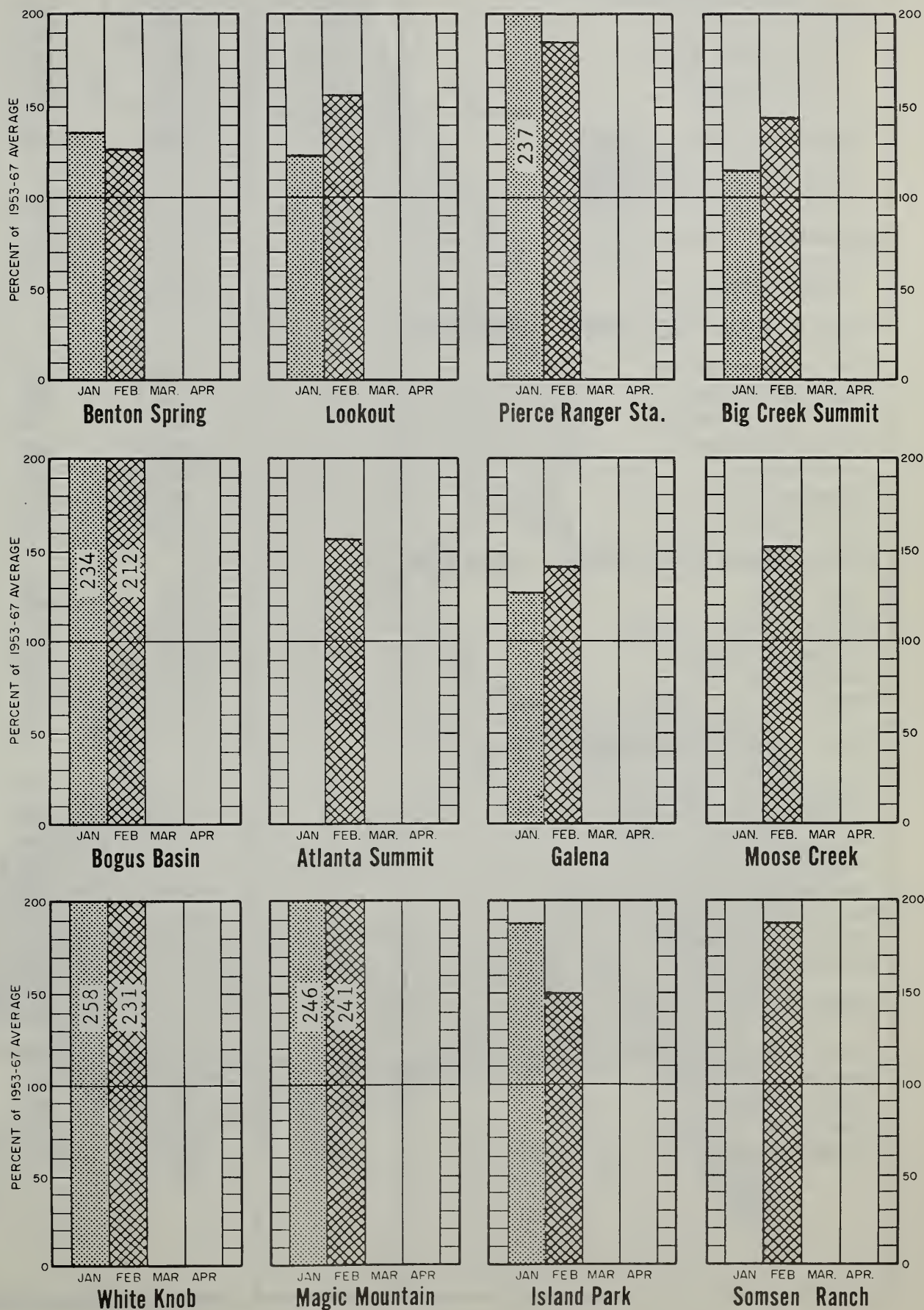
A few low elevation watersheds produced flooding during a warm spell in January and the potential is still present for additional rapid, high volume runoff on several streams. Warm temperatures, rain, or a combination of these factors, would cause many low elevation watersheds to be vulnerable to this condition.

Considerable ice has formed in the upper reaches of many streams and rivers, posing the possibility of ice jams downstream in the event of a warming trend or rain and resulting increased flow. Thought should be given to possible protective measures for bridge pilings and other structures and/or flooding which often results when ice jams occur.

SNOW WATER DEPTHS ACCUMULATION For Selected Snow Courses

As Compared To 1953-67 15 Yr. Average

FEBRUARY 1, 1972



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO.OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1953-67 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Kootenai River	10	134	144
Pend Oreille River	33	118	163
Clark Fork River	22	120	160
Flathead River	11	120	164
Priest River	2-4	100	120
Spokane River	3-5	115	165
<u>LOWER SNAKE RIVER BASIN</u>			
Palouse River	5	195	195
Clearwater River	7-24	120	170
Salmon River	11-18	95	145
Lemhi River	6	100	--
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	5	100	155
Big Lost River	3-5	70	165
Little Wood River	3-4	65	120
Big Wood River	6	85	140
Boise River	10	100	180
Payette River	8	95	155
Weiser River	1	80	155
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	2	140	240
Goose-Trapper Creeks	1	195	285
Salmon Falls Creek	9-10	135	215
Bruneau River	4	130	230
Owyhee River - Idaho, Nevada	6-14	175	240
<u>UPPER SNAKE RIVER BASIN</u>			
Upper Snake - Wyoming	23	95	155
Camas-Beaver Creeks	2	75	160
Medicine Lodge Creek	2	85	180
Henry's Fork River	11-12	90	140
Teton River	2-3	125	170
Willow-Sand Creeks	8	160	--
Blackfoot River	4	105	185
Portneuf River	3-8	110	205
<u>GREAT BASIN</u>			
Bear River	2-5	90	160
Montpelier Creek	4-5	105	200
Mink Creek	4-7	80	160
Cub River	2	85	150
Malad River	2-6	120	215




SNOW WATER DEPTHS

As percent of 1953-67 15 year average

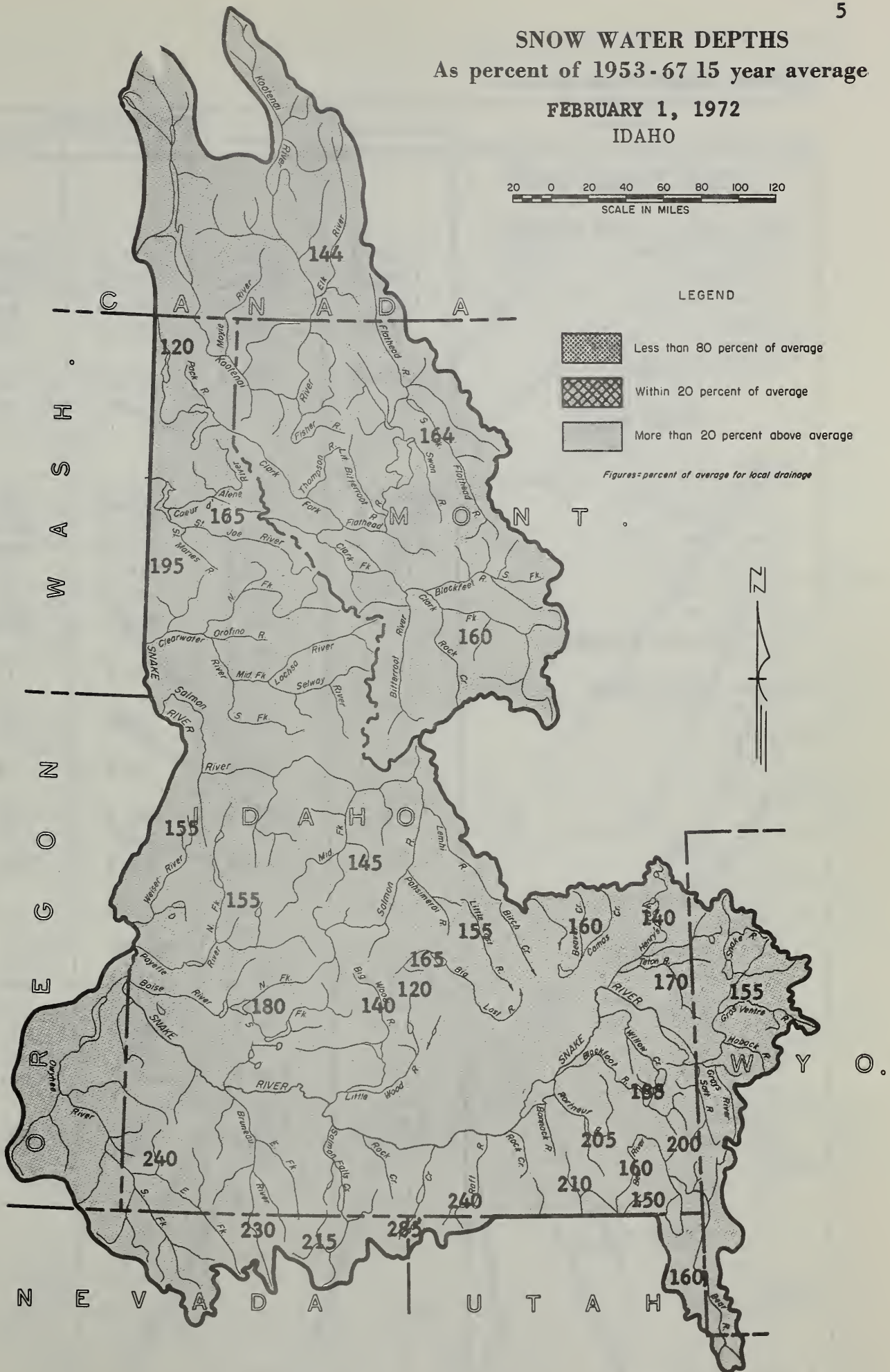
FEBRUARY 1, 1972
IDAHO

20 0 20 40 60 80 100 120
SCALE IN MILES

LEGEND

-  Less than 80 percent of average
-  Within 20 percent of average
-  More than 20 percent above average

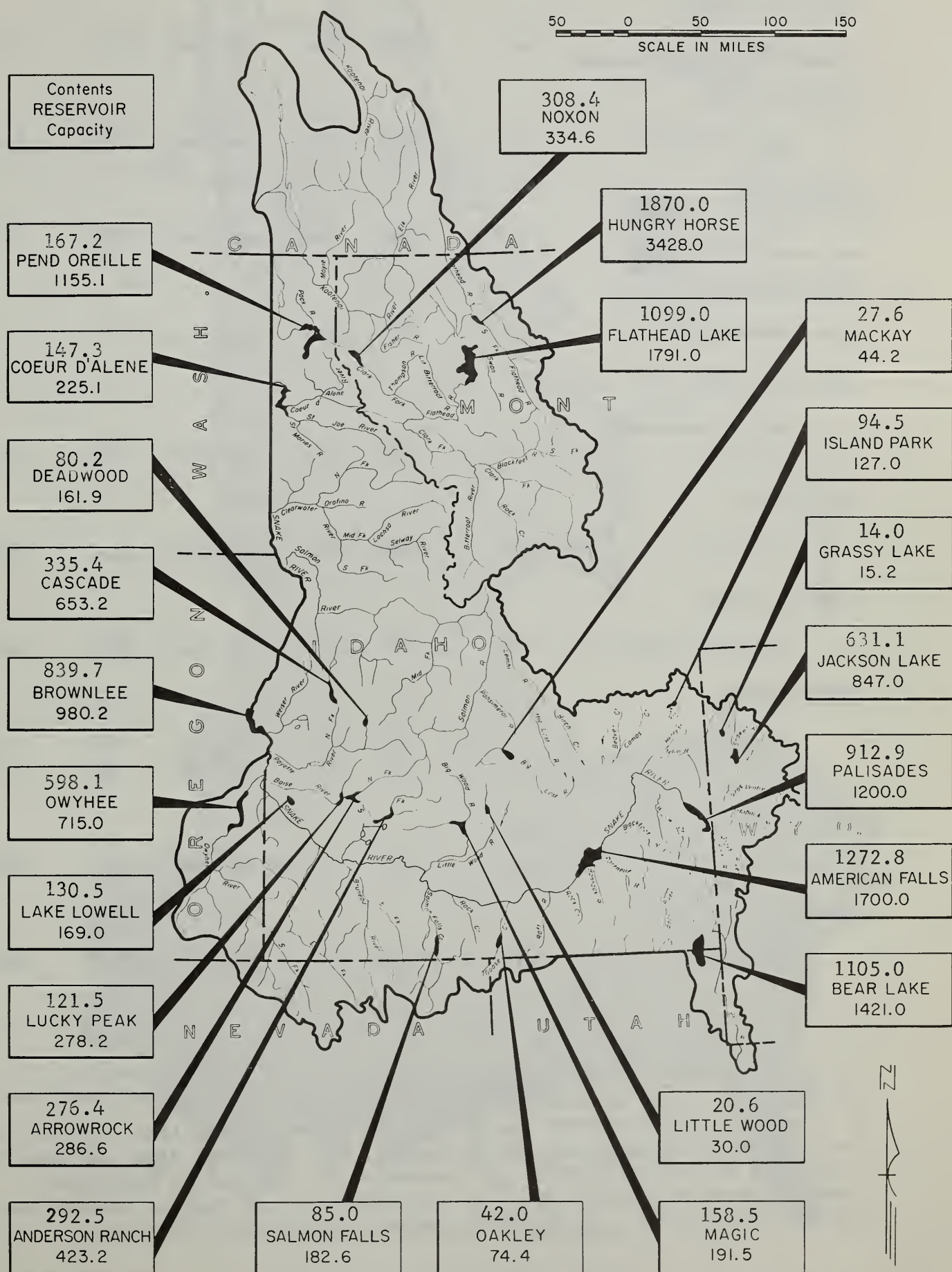
Figures=percent of average for local drainage



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1953-57 AVERAGE
<u>UPPER COLUMBIA BASIN</u>				
<u>Clark Fork - Pend Oreille</u>				
Hungry Horse	3428.0	1870.0	1980.0	2474.0*
Flathead	1791.0	1099.0	1150.0	1186.0
Pend Oreille	1155.1	167.2	303.4	510.0
Noxon	334.6	308.4	332.1	320.2*
<u>Spokane</u>				
Coeur d'Alene	225.1	147.3	202.5	123.4
<u>SNAKE BASIN</u>				
<u>Snake</u>				
Jackson Lake	847.0	631.1	597.6	440.2
Palisades	1200.0	912.9	966.0	673.2*
American Falls	1700.0	1272.8	1269.9	1241.1
Island Park	127.0	94.5	116.6	97.5
Grassy Lake	15.2	14.0	12.2	10.5
Brownlee	980.2	839.7	901.1	539.8*
<u>Goose-Trapper Creeks</u>				
Oakley	74.4	42.0	31.6	13.5
<u>Salmon Falls Creek</u>				
Salmon Falls	182.6	85.0	45.6	22.7
<u>Big Lost</u>				
Mackay	44.2	27.6	36.9	28.9
<u>Big Wood</u>				
Magic	191.5	158.5	126.3	91.5
<u>Little Wood</u>				
Little Wood	30.0	20.6	15.8	10.5*
<u>Fish Creek</u>				
Carey Valley	14.4	7.8	7.3	--
<u>Boise</u>				
Anderson Ranch	423.2	292.5	311.1	227.0
Arrowrock	286.6	276.4	278.6	227.7
Lucky Peak	278.2	121.5	151.9	108.5*
Lake Lowell (Deer Flat)	169.0	130.5	126.7	101.1
<u>Owyhee</u>				
Owyhee	715.0	598.1	699.5	359.3
<u>Payette</u>				
Cascade	653.2	335.4	447.1	276.9
Deadwood	161.9	80.2	92.9	69.1
<u>Weiser</u>				
Mann Creek	11.1	3.2	8.1	--
<u>GREAT BASIN</u>				
<u>Bear</u>				
Bear Lake	1421.0	1105.0	1098.7	854.0
* Period of Record.				

FEBRUARY 1, 1972



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average †

KOOTENAI RIVER

Leonia (at) 11400 124 Apr-Sep 10434 9198

SPOKANE RIVER

Post Falls 1/ (at) 3950 126 Apr-Sep 3907 3140

SNAKE RIVER

Heise 2/ (nr) 5240 140 Apr-Sep 6267 3743

BIG LOST RIVER

Mackay 3/ (nr) 235 140 Apr-Sep -- 168

BIG WOOD RIVER

Magic Reservoir
Inflow 400 150 Apr-Sep 616 268

BOISE RIVER

Boise 4/ (nr) 2330 150 Apr-Sep 2610 1556

PAYETTE RIVER

Horseshoe Bend 5/ (nr) 2480 135 Apr-Sep 2891 1839

OWYHEE RIVER

Lake Owyhee 900 205 Feb-Jul 805 438
net inflow 6/ 700 233 Apr-Sep 504 300

SALMON RIVER

Whitebird (at) 9040 132 Apr-Sep 10398 6850

CLEARWATER RIVER

Spalding (at) 11490 134 Apr-Sep 10707 8578

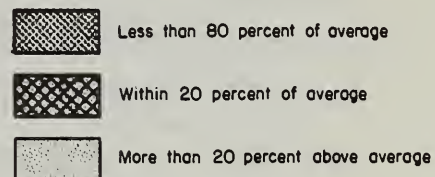
(c) Assuming normal meteorological conditions.

1/ Observed flow corrected for storage in Coeur d'Alene Lake. 2/ Corrected for storage in Jackson Lake and Palisades. 3/ Observed flow corrected for storage in Mackay Reservoir. 4/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak. 5/ Corrected for storage in Cascade and Deadwood Reservoirs. 6/ U.S.B.R. records of inflow.

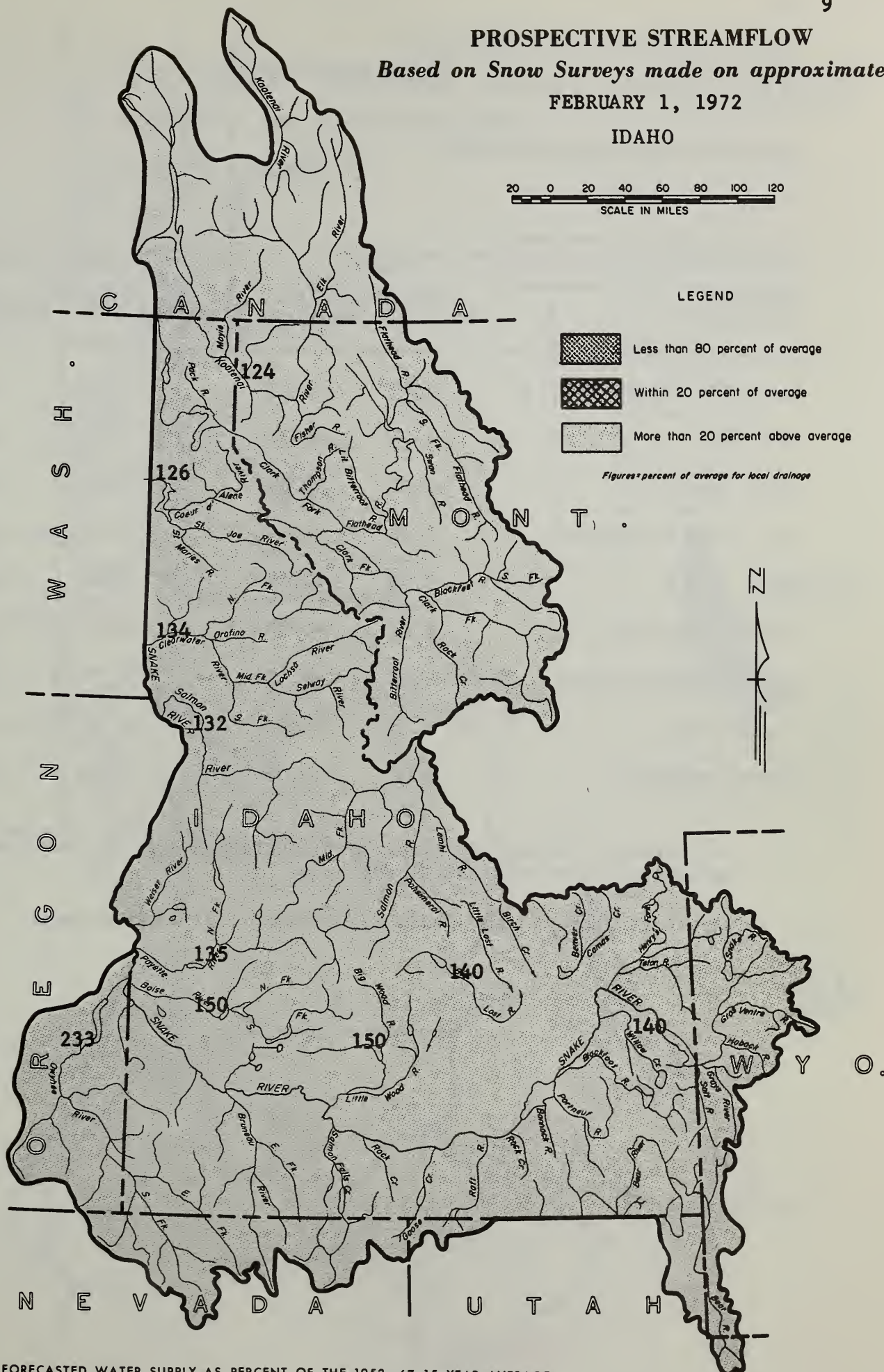
PROSPECTIVE STREAMFLOW
Based on Snow Surveys made on approximately
FEBRUARY 1, 1972
IDAHO

20 0 20 40 60 80 100 120
 SCALE IN MILES

LEGEND



Figures=percent of average for local drainage



FORECASTED WATER SUPPLY AS PERCENT OF THE 1953-67 15 YEAR AVERAGE

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter January 1972		Fall - Winter Nov. 71 - Jan. 72	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U. S.	4.49	+0.90	12.73	+2.81
Flathead	4.14	+1.71	9.07	+2.22
Clark Fork	1.97	+0.87	3.89	+0.83
Pend Oreille-Spokane	5.82	+1.42	13.99	+1.52
Upper Snake	3.31	+0.96	8.88	+2.43
Snake River Plain	1.50	+0.55	4.69	+1.86
Salmon-Payette-Boise	3.36	+0.53	8.72	+1.18
Clearwater	3.84	+0.64	10.51	+1.52
Owyhee-Malheur	1.30	+0.08	4.28	+0.85

1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Departure from 15-year (1953-67) drainage division average.



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

UPPER COLUMBIA BASIN

KOOTENAI RIVER

16A1	I	Smith Creek	29	64N	3W	4800
------	---	-------------	----	-----	----	------

PEND OREILLE - PRIEST RIVER

16A2	I	Benton Meadow	27	58N	4W	2344
16A3M	I	Benton Spring	30	58N	3W	4900
16A6	I	Schweitzer Bowl	20	58N	2W	4500
16A5	I	Schweitzer Ridge	19	58N	2W	6100

SPOKANE RIVER

15B8S	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	34	47N	6E	3770
16B2	I	Copper Ridge	6 & 7	50N	1W	4800
16B3M	I	Fourth of July Summit	6	49N	1W	3100
15B13A	I	Granite Peak	3	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2MS	I	Lookout	4	47N	6E	5250
16B1	I	Lower Sands Creek	32	51N	1W	3400
15B4A	I	Medicine Ridge	24	43N	10E	6150
16A4AS	I	Mosquito Ridge	5	54N	2E	5110
15B12A	I	Outlaw Creek	19	44N	5E	3750
15B15a	I	Pegleg Mountain	15	44N	9E	5735
15B5A	I	Roland Summit	26	47N	6E	5200
16C1S	I	Sherwin	28 & 33	42N	1E	3200
15B9A	I	Sunset	28	49N	5E	5600
15B16a	I	Timber Camp Flat	23	44N	9E	4300

LOWER SNAKE BASIN

PALOUSE RIVER

16C6	I	Crumarine Creek	24	40N	5W	3340
16C3	I	East Twin	13	40N	5W	4050
16C5	I	Howard Creek	14	40N	5W	3450
16C2	I	Moscow Mountain	18	40N	4W	4400
16C7SR	I	Upper Moscow Mountain	16	40N	4W	4600
16C4P	I	West Twin	14	40N	5W	4250

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

CLEARWATER RIVER

16C11	I	Above Greer	14	35N	2E	1240
15D7a	I	Anderson Butte	34	30N	9E	6800
15D8a	I	Anderson Ridge	35	30N	9E	5400
15D9p	I	Blackhawk	31	29N	10E	6080
16C14m	I	Brown	11	35N	3E	3100
15D5MAP	I	Buck Meadows	26	31N	8E	5600
15C3A	I	Cayuse Airstrip	4	38N	11E	3700
15C7R	I	Coolwater Mountain	32	33N	8E	6200
15D10a	I	Copper Butte	35	31N	10E	6000
16C16	I	Cottonwood Butte	33	32N	1W	5140
15C9A	I	Crater Meadows	2	37	9E	6100
14C10	I	Crooked Fork	27	37N	14E	3800
15D11a	I	Disgrace Butte	26	30N	10E	6600
16C15A	I	Elk Butte	6	40N	3E	5550
15D12p	I	Elk City Rgr. Sta.	23	29N	8E	4000
15D13ap	I	Elk Mountain	34	30N	11E	6900
15C11a	I	Falls Point	10	31N	9E	4600
15C12p	I	Fenn Ranger Station	23	32N	7E	1580
15C2AP	I	Fish Lake Airstrip	35	35N	11E	5000
15C8m	I	Fohl	16	36N	5E	3450
16C9	I	Forest	1	32N	3W	4550
15B3A	I	Forty-nine Meadows	6	43N	5E	5000
14C9A	I	Goat Lake	4	38N	13E	6600
15D14p	I	Green Mountain	15	28N	11E	7000
16C13	I	Greer Summit	13	35N	2E	3000
15C6APR	I	Hemlock Butte	7	36N	7E	5500
15C8s	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
15C14	I	Horse Creek #1	25	31N	8E	5500
15C15	I	Horse Creek #4	5	30N	9E	5400
15D21a	I	Horse Point	4	30N	9E	5700
15D22ap	I	Indian Hill	30	31N	10E	6100
14D3	I	Kit Carson Pasture	4	27N	16E	5020
14C5M	I	Lolo Pass	16	38N	15E	5230
15B14AS	I	Lost Lake	16	43N	4E	6000
15D15p	I	Lower Horse Creek	28	31N	9E	4100
16D7	I	Lower Snowhaven	9	29N	3E	5250
16C8	I	McCann	25	33N	3W	4300
15D16p	I	Meadow Creek Guard Station	5	29N	10E	2955
15D17a	I	Meadow Creek Lookout	25	29N	11E	7000
16C12M	I	Midway	14	35N	2E	2200
15D18ps	I	Mill Site	22	28N	11E	6700
15D6AP	I	Mountain Meadows	9	27N	10E	6300
14D1	M	Nez Perce Pass	25	1S	24W	6575
15D4R	I	Orogrande Mountain	24	27N	6E	7800
15C5	I	Pierce Ranger Station	2	36N	5E	3170
14C6	I	Powell Ranger Station	33	37N	14E	4230
15D19p	I	Red River Ranger Station	4	27N	9E	4340
15D20a	I	Sable Hill	14	29N	10E	6000
14C4	I	Savage Pass	18	36N	15E	6600
15C4A	I	Shanghai Summit	7	37N	6E	4600
15C13p	I	Slim's Camp	11	31N	9E	1850
16C10	I	Sweeney	1	32N	3W	4435
16D4	I	Upper Snowhaven	8 & 9	29N	3E	5600

SALMON RIVER

13E19MA	I	Above Gilmore	13	13N	26E	8200
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
15E2	I	Big Creek Summit	24	15N	5E	6600
13E8a	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
16D2	I	Chapman Creek	16	29N	2E	4215
13E17A	I	Copes Camp	36	18N	22E	7500
13E25a	I	Doublespring Pass	3	10N	22E	8400
13D17a	I	Gertson Creek	22	22N	23E	8050
13D2	M	Gibbons Pass	4	2S	19W	7100
13D9	M	Gold Stone	11	8S	16W	8100
13E20A	I	Hall Creek	1	16N	27E	7560
16D3	I	Johns Creek	9	29N	2E	3805
14E6a	I	Keystone	15	13N	18E	7700
13E24ap	I	Leatherman Pass	20	9N	23E	9800
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23	M	Lemhi Ridge	4	10S	15W	8100
13E18MA	I	Meadow Lake	24	13N	26E	9100
14E1MAP	I	Mill Creek Summit	8	13N	17E	8870
13D16	I	Moose Creek	22 & 26	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
14E2	I	Redfish Lake	3	9N	13E	6600
13E16A	I	Schwartz Lake	34	18N	22E	8500
13E2	M	Trail Creek	15	10S	15W	7090
14E3a	I	Twin Peaks	28	15N	17E	10300
14F4AP	I	Vienna Mine	32	6N	14E	8900
16D5	I	Whitebird Summit	17	29N	2E	4390
14D4	I	Williams Creek Summit	34	21N	20E	7800

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

UPPER COLUMBIA RIVER BASINPEND OREILLE - PRIEST RIVER

Benton Meadow	2344	1/28	19	5.0	7.1	5.1
Benton Spring	4900	2/2	55	18.0	15.8	14.0
#Mosquito Ridge (SP)	5110	1/31	--	29.0	27.0	--
Schweitzer Bowl	4500	1/28	75	28.8	28.3	--
Schweitzer Ridge	6100	1/28	116	40.0	39.7	--

SPOKANE RIVER

Above Burke (SP)	4100	2/1	--	18.6	15.5	--
Fourth of July Summit	3100	1/31	44	12.2	10.0	6.4*
Lookout	5250	1/31	121	39.3	36.1	25.0
Lookout (SP)	5250	1/31	--	38.2	--	--
Mosquito Ridge (SP)	5110	1/31	--	29.0	27.0	--
Sherwin	3200	1/28	61	18.1	11.5	10.4*
Sherwin (SP)	3200	1/28	--	19.0	12.2	--

LOWER SNAKE RIVER BASINPALOUSE RIVER

Crumarine Creek	3340	1/27	44	13.9	6.1	5.9*
East Twin	4050	1/27	55	17.8	7.5	10.5*
Howard Creek	3450	1/27	34	10.4	4.2	4.8*
Moscow Mountain	4400	1/27	66	21.6	14.3	12.2*
West Twin	4250	1/27	49	17.3	9.4	8.4*

CLEARWATER RIVER

Above Greer	1240	1/31	T	T	0.0	--
Cayuse Airstrip	3700	2/2	52	17.0	10.0	7.6*
Coolwater Mountain (R)	6200	1/31	--	31.5	--	--
Coolwater Mountain (SP)	6200	1/31	--	28.1	23.6	--
Cottonwood Butte	5140	1/27	58	17.0	11.8	--
Crater Meadows (A)	6100	2/2	139	46.6	37.8	--
Crooked Fork	3800	1/26	53	17.4	14.2	--
Fish Lake Airstrip	5000	2/2	117	41.3	43.5	25.1*
Forest	4550	2/1	37	12.0	6.7	5.3*
Greer Summit	3000	1/31	12	3.0	0.0	--
Hemlock Butte	5500	2/2	160	53.6	47.0	34.2*
Hemlock Butte (R)	5500	1/31	--	51.9	53.1	--
Hemlock Butte (SP)	5500	1/31	--	56.9	51.8	--
#Hoodoo Basin Mont.	6000	1/28	156	52.2	48.3	--
#Hoodoo Basin (SP) Mont.	6000	2/1	--	50.8	46.6	--
#Hoodoo Creek Mont.	5900	1/28	157	51.5	47.0	--
Lolo Pass	5230	1/25	122	33.2	26.6	--

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b
Lower Snowhaven	5250	1/28	77	21.7	15.0	--
McCann	4300	2/1	30	9.0	7.1	5.1*
Midway	2200	1/31	8	2.7	0.0	--
Mill Site (SP)	6700	1/31	81	30.3	24.6	--
Mountain Meadows	6300	1/31	68	21.1	18.8	--
Orogrande Mountain (R)	7800	1/31	--	36.4	31.8	--
Pierce Ranger Station	3170	2/1	55	15.6	10.2	8.5
Powell Ranger Station	4230	1/26	53	16.0	13.4	--
Savage Pass	6600	1/28	85	26.7	23.4	--
Shanghai Summit (A)	4600	1/31	90	27.0	23.0	--
Sweeney	4435	2/1	31	8.1	5.2	5.0*
Upper Snowhaven	5600	1/28	76	22.8	16.0	--

SALMON RIVER

Big Creek Summit	6600	1/29	109	33.5	37.4	23.2
#Boulder Creek	5500	1/31	78	25.0	30.6	15.9*
Brundage Mountain	7560	1/27	134	42.4	47.8	--
Chapman Creek	4215	1/28	24	6.1	4.1	2.8*
#Deadwood Summit	7000	1/29	124	38.0	--	28.8*
#Deadwood Summit (SP)	7000	1/29	--	38.1	--	--
#Galena Summit	8795	1/26	87	23.2	25.3	15.3
#Gibbons Pass Mont.	7100	2/1	71	21.3	22.2	14.4
Johns Creek	3805	1/28	14	3.0	0.7	2.0*
Mill Creek Summit	8870	1/31	65	21.0	22.5	--
Moose Creek	6200	2/1	55	16.6	18.2	10.9
Morgan Creek	7580	1/29	47	13.8	14.4	11.1*
#Rock Flat Summit	5200	1/27	60	16.9	21.6	11.7
#Secesh Summit	6600	1/31	100	32.2	--	--
#Squaw Meadow	5800	1/31	105	30.6	--	--
Vienna Mine	8900	1/29	113	34.0	--	--
Whitebird Summit	4390	1/28	33	10.0	7.5	4.8*

Lemhi River

Above Gilmore	8200	1/28	38	10.7	8.9	--
Aspen-Hall Pass	8110	1/28	37	8.8	6.7	--
Copes Camp	7500	1/27	34	8.3	7.4	--
Hall Creek	7560	1/28	32	8.0	3.7	--
Meadow Lake	9100	1/28	60	18.6	17.8	--
Schwartz Lake	8500	1/27	44	12.1	11.6	--

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>SPOKANE RIVER</u>							
Fourth of July Summit	3100	48	11.6	1/31	10.2	10.4	10.2
Lookout	5250	48	11.0	1/31	6.8	8.5	7.5
<u>CLEARWATER RIVER</u>							
Brown	3100	36	6.7	1/31	6.1	6.5	5.9
Midway	2200	36	6.1	1/31	5.0	5.0	5.1
<u>SALMON RIVER</u>							
Mill Creek Summit	8870	48	9.4	1/31	4.6	5.5	4.4
<u>Lemhi River</u>							
Above Gilmore	8200	60	5.4	1/28	4.0	2.8	2.4
Meadow Lake	9100	48	4.4	1/28	2.4	2.4	1.9

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

MIDDLE SNAKE RIVER BASIN - NORTHSIDELITTLE LOST RIVER

Fairview Guard Station	6750	1/25	25	5.8	5.8	3.2*
Lost Garfield	6600	1/25	24	5.3	4.0	2.6*
Moonshine	7450	1/25	41	10.9	10.0	8.3*
Sawmill Canyon	6900	1/25	34	8.5	9.4	5.8*
Wet Creek Summit	7600	1/26	47	12.8	14.0	7.8*

BIG LOST RIVER

Bear Canyon	7920	1/31	49	13.0	19.9	--
Copper Basin	7650	1/31	24	6.3	11.4	--
Iron Bog	7650	1/27	48	12.4	17.2	8.0*
Leadbelt	6800	1/27	33	7.7	11.8	6.2*
White Knob	7700	1/28	38	11.8	13.1	5.1*

LITTLE WOOD RIVER

#Bear Canyon	7920	1/31	49	13.0	19.9	--
Garfield Rgr. Sta.	6554	1/27	38	8.5	13.5	7.0*
Muldoon	6300	1/27	28	6.3	9.2	5.5*
Swede Peak	7500	1/27	53	13.1	20.8	10.4*

BIG WOOD RIVER

Camas Creeks Divide	5720	1/28	37	11.4	--	--
#Couch Summit	6950	1/31	57	16.5	21.8	10.9*
Galena	7300	1/26	74	18.8	20.8	13.3
Galena Summit	8795	1/26	87	23.2	25.3	15.3
Graham Ranch	6200	1/27	48	11.6	15.6	9.3
Mascot Mine	7900	2/1	40	10.4	--	--
Mount Baldy	9000	1/27	71	17.2	21.8	13.8
Soldier Rgr. Sta.	6100	1/31	45	13.8	15.0	8.4*
#Vienna Mine	8900	1/29	113	34.0	--	--

CANYON CREEK

Bennett Mountain	6650	1/28	74	21.4	18.2	11.8*
#Camas Creeks Divide	5720	1/28	37	11.4	--	--
Dixie Hill	5230	1/28	19	6.3	5.3	--
Little Camas Flat	4950	1/28	27	9.2	--	--

BOISE RIVER

Atlanta Summit	7500	1/29	111	32.5	38.3	20.7*
Atlanta Summit (SP)	7500	1/29	108	33.5	--	--
Bad Bear	5500	2/1	63	21.1	15.2	9.9*

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

MIDDLE SNAKE RIVER BASIN NORTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- † Aerial Snow Depth Gage
- ▲ Soil Moisture Station
- Temperature Gage
- └ Precipitation Gage
- ⚡ Radio Telemetry



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LITTLE LOST RIVER

13E5M	I	Fairview Guard Station	27	12N	26E	6750
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6	I	Moonshine	31	13N	26E	7450
13E4	I	Sawmill Canyon	17	12N	26E	6900
13E9a	I	Swauger Lake	26	9N	24E	9050
13E7MAP	I	Wet Creek Summit	15	8N	25E	7600

BIG LOST RIVER

13F18p	I	Antelope Pass	7	5N	23E	8800
13F3	I	Bear Canyon	26	5N	21E	7920
13F13a	I	Cherry Creek Pass	7	5N	23E	8900
13F2A	I	Copper Basin	24	6N	21E	7650
13F19p	I	Corral Creek Summit	25	7N	22E	8550
13F20ap	I	Dry Fork	23	3N	23E	7340
13F8a	I	Fishpole Lake	28	4N	22E	9350
13F7a	I	Grasshopper	15	4N	22E	8400
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6800
14F3A	I	Lost Wood Divide	19	6N	19E	7900
13F17ap	I	Mammoth Canyon	14	6N	23E	8300
14F15a	I	North Fork Meadow	20	7N	18E	8150
14F6p	I	Park Creek	18	6N	19E	7685
14E5ap	I	Sage Creek	12	9N	20E	7800
13F14ap	I	Slickrock	17	4N	22E	8640
14F2A	I	Stickney Mill	9	6N	19E	7500
13F1	I	White Knob	25	7N	23E	7700

BIG WOOD RIVER

15F9a	I	Camas Creeks Divide	11	2S	9E	5720
14F8AP	I	Dollarhide Summit	16	3N	15E	8620
14F1M	I	Galena	3	6N	15E	7300
14F12MP	I	Galena Summit	33	7N	15E	8795
14F5	I	Graham Ranch	10	5N	17E	6200
14F7	I	Mascot Mine	8	4N	20E	7900
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100

LITTLE WOOD RIVER

13F4M	I	Garfield Ranger Station	11	3N	21E	6554
13F5	I	Muldoon	25	3N	21E	6300
14F13m	I	Niggerhead	26	2N	20E	5450
14F14a	I	Porcupine	30	4N	20E	8350
13F9A	I	Swede Peak	4	3N	21E	7500

FISH CREEK

13F10	I	Iron Mine Creek	32	3N	23E	6370
13F6	I	Telfer Ranch	12	2N	22E	6000

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

BOISE RIVER

15F4APS	I	Atlanta Summit	23	5N	10E	7500
15F2M	I	Bad Bear	35	7N	6E	5500
16F4	I	Bogus Basin Road	32	5N	3E	5360
16F5m	I	Bogus Basin Road	36	5N	2E	4830
14F10A	I	Couch Summit	9	2N	14E	6950
15F10a	I	Danskin	17	1N	7E	5650
16F1	I	Deadman Gulch	29	7N	4E	5600
15E9AP	I	Jackson Peak	7	8N	9E	7000
15F1MP	I	Moore's Creek Summit	19	7N	7E	6100
15F6P	I	Prairie	13	2N	7E	4900
15F3A	I	Road Creek	5	5N	8E	5550
15F5APS	I	Trinity Mountain	7	3N	9E	7780
15F11a	I	Willow Creek Cabin	26	1N	6E	4710

CANYON CREEK

15F7	I	Bennett Mountain	7	2S	9E	6650
15F8	I	Dixie Hill	13	2S	8E	5230
15F12a	I	Little Camas Flat	21	1S	9E	4950
15F13a	I	Long Tom	19	1S	8E	4550

PAYETTE RIVER

16F2MPS	I	Bogus Basin	16	5N	3E	6120
15E8	I	Cozy Cove	19	11N	7E	5900
15E3	I	Crawford Ranger Station	21	14N	4E	4800
15E10	I	Deadwood Airstrip	8	11N	7E	5440
15E7	I	Deadwood Dam	8	11N	7E	5290
15E4A	I	Deadwood Summit	23	14N	7E	7000
16E7a	I	Greenfield Flat	1	13N	2E	7370
16E4	I	High Valley Summit	9	10N	2E	5170
15E1	I	Lake Fork	3	18N	4E	6000
16E1	I	Rock Flat Summit	1	18N	2E	5200
15D1	I	Secesh Summit	34	22N	4E	6600
16F7	I	Shafer Butte	15	5N	3E	7480
15E5A	I	Silver Creek Ridge	24	12N	5E	5700
15D2A	I	Squaw Meadow	5	21N	4E	5800
16E3	I	Tripod Summit	17	11N	3E	5200

WEISER RIVER

16D1P	I	Boulder Creek	15	20N	1W	5500
16E6a	I	Mica Ridge	15	15N	2E	6800
16E2	I	Placer Creek	15 & 16	17N	3W	6000
16E5a	I	Squaw Flat	32	17N	2E	6230

MANN CREEK

16E9	I	Mann Creek	29	15N	5W	5980
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
17E2	I	Thorson Cabin	12	14N	6W	5320

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b
#Bennett Mountain	6650	1/28	74	21.4	18.2	11.8*
#Bogus Basin	6120	1/28	93	31.3	26.3	14.8
Bogus Basin Road	5360	1/28	39	13.5	9.0	4.8*
#Camas Creeks Divide	5720	1/28	37	11.4	--	--
Couch Summit	6950	1/31	57	16.5	21.8	10.9*
#Dixie Hill	5230	1/28	19	6.3	5.3	--
Jackson Peak	7000	2/3	100	32.1	--	20.3*
#Little Camas Flat	4950	1/28	27	9.2	--	--
Moore's Creek Summit	6100	2/1	113	37.4	35.3	20.9
Prairie	4900	1/29	37	11.1	9.1	4.7
#Soldier Rgr. Sta.	6100	1/31	45	13.8	15.0	8.4*
Trinity Mountain	7780	1/29	121	39.7	43.4	26.4*
Trinity Mountain (SP)	7780	1/29	134	44.8	--	--
#Vienna Mine	8900	1/29	113	34.0	--	--

PAYETTE RIVER

#Big Creek Summit	6600	1/29	109	33.5	37.4	23.2
Bogus Basin	6120	1/28	93	31.3	26.3	14.8
#Brundage Mountain	7560	1/27	134	42.4	47.8	--
Cozy Cove	5900	1/27	52	17.6	19.0	10.7
Crawford Rgr. Sta.	4800	1/31	29	9.4	11.4	5.6*
Deadwood Airstrip	5440	1/27	53	16.5	15.5	10.3*
Deadwood Dam	5290	1/27	52	16.4	18.5	11.0
Deadwood Summit	7000	1/29	124	38.0	--	28.8*
Deadwood Summit (SP)	7000	1/29	--	38.1	--	--
#Jackson Peak	7000	2/3	100	32.1	--	20.3*
Lake Fork	6000	1/28	52	14.6	--	--
Rock Flat Summit	5200	1/27	60	16.9	21.6	11.7
Secesh Summit	6600	1/31	100	32.2	--	--
Squaw Meadow	5800	1/31	105	30.6	--	--

WEISER RIVER

Boulder Creek	5500	1/31	78	25.0	30.6	15.9*
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SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
<u>LITTLE LOST RIVER</u>							
Fairview Guard Station	5850	42	7.6	1/25	8.0	7.5 ^j	7.5
Wet Creek Summit	8175	48	17.1	1/26	13.7	13.2	12.4
<u>BIG WOOD RIVER</u>							
Galena	7300	48	10.1	1/26	5.7	7.0	4.2
Galena Summit	8795	48	5.8	1/26	Frozen	Frozen	1.7
^j January Measurement							

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b

MIDDLE SNAKE RIVER BASIN - SOUTHSIDERAFT RIVER

George Peak (SP)	9000	1/31	--	23.0	--	--
Howell Canyon	8000	1/31	102	35.9	25.3	15.0*
Sublett	6000	1/28	47	15.4	12.0	6.2*

GOOSE CREEK

Badger Gulch	6660	1/27	53	17.6	9.0	6.2*
--------------	------	------	----	------	-----	------

SALMON FALLS CREEK

#Bear Creek (A) Nev.	7800	1/24	64	20.4	17.6	11.3*
Cedar Creek (A)	7000	1/24	38	12.9	8.6	6.5*
Deadline	6900	1/28	100	34.0	20.9	13.8*
Goat Creek (A) Nev.	8800	1/24	51	16.4	18.4	10.3*
#Hummingbird Springs(A) Nev.	8945	1/24	101	32.2	23.6	11.1*
Magic Mountain	6700	1/28	81	26.0	16.9	10.8*
#Pole Creek R.S. Nev.	8330	1/27	64	20.4	18.0	10.8*
Red Point (A) Nev.	7940	1/24	27	8.6	4.4	6.2*
Shoshone Basin	5740	1/28	31	11.0	3.8	3.1*
Wilson Creek (A)	7500	1/24	45	14.4	13.6	--

BRUNEAU RIVER

Bear Creek (A) Nev.	7800	1/24	64	20.4	17.6	11.3*
Hummingbird Springs (A) Nev.	8945	1/24	101	32.2	23.6	11.1*
Pole Creek R. S. Nev.	8330	1/27	64	20.4	18.0	10.8*
#Seventy-six Creek (A) Nev.	7100	1/28	59	17.7	9.2	6.1*

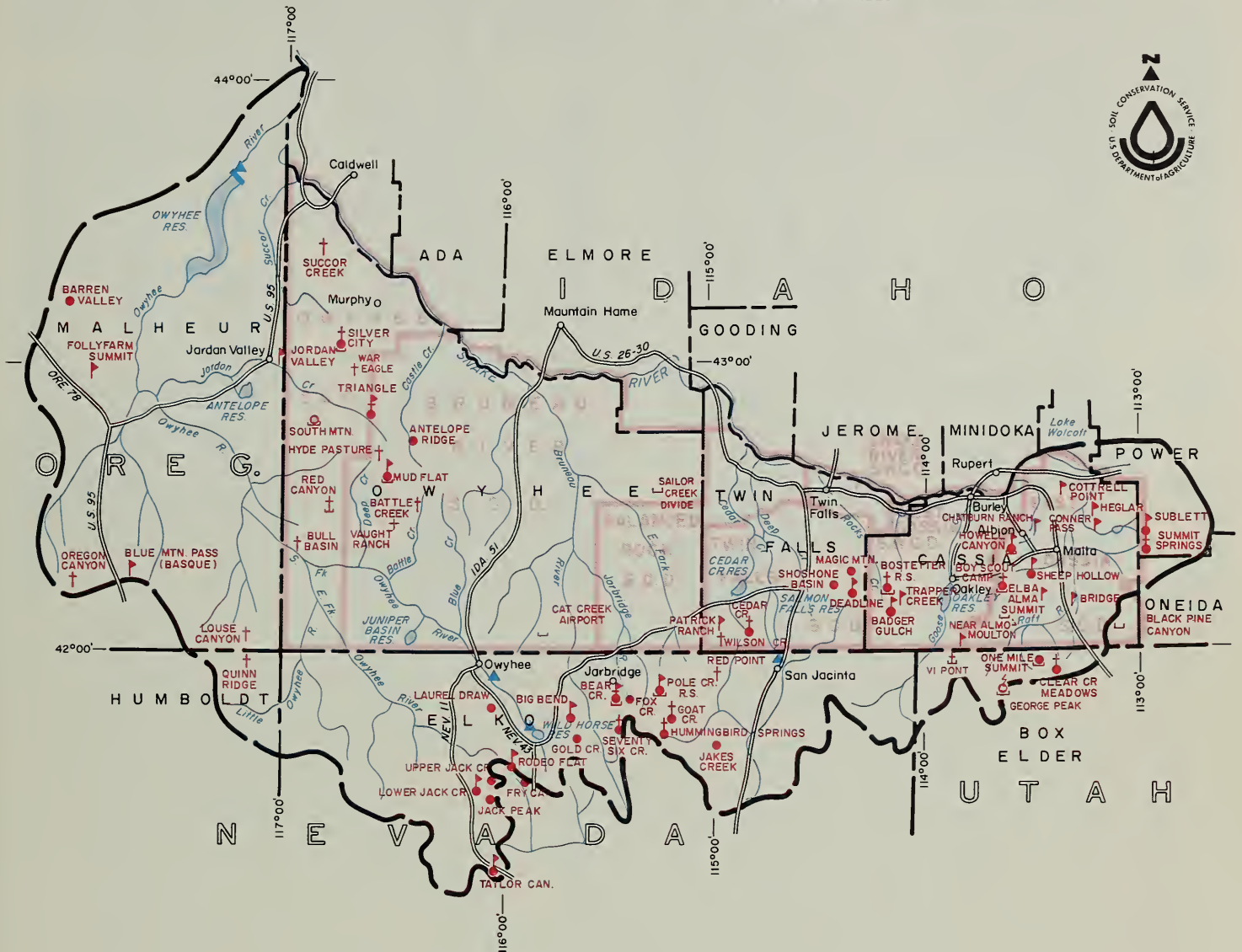
OWYHEE RIVER

Antelope Ridge	5900	1/26	43	13.4	5.0	3.4*
Battle Creek (A)	5700	2/1	22	5.9	0.0	--
#Bear Creek (A) Nev.	7800	1/24	64	20.4	17.6	11.3*
Bull Basin (A)	5600	2/1	6	1.2	0.0	--
Hyde Pasture (A)	5800	2/1	29	7.8	3.2	--
Mud Flat	5500	1/26	30	8.2	5.2	3.4*
Red Canyon (A)	6650	2/1	31	8.4	4.0	--
#Seventy-six Creek Nev.	7100	1/28	59	17.7	9.2	6.1*
Silver City	6400	1/31	62	20.7	14.1	9.2*
South Mountain	6340	1/27	54	17.0	11.6	7.3
Succor Creek (A)	6100	2/1	29	7.8	2.3	--
Triangle (A)	5150	2/1	12	2.4	0.0	--
Vaught Ranch (A)	5950	2/1	22	5.9	0.0	--
War Eagle (A)	7700	2/1	64	20.7	17.8	--

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Cage snow-water equivalent.

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

25 0 25 50 75
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- † Aerial Snow Depth Gage
- ▲ Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- ⚡ Radio Telemetry

WATERSHED LOCATIONS



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
MIDDLE SNAKE RIVER BASIN SOUTHSIDE						
RAFT RIVER						
13G15p	I	Black Pine Canyon	28	15S	29E	7100
13G2AP	I	Boy Scout Camp	8	14S	24E	7600
13G11m	I	Bridge	7	15S	27E	4750
13G13m	I	Chatburn Ranch	4	12S	25E	4700
13H2A	U	Clear Creek Meadows	26	14N	14W	9050
13G6m	I	Conner Pass	35	12S	25E	5700
13G7m	I	Cottrell Point	24	10S	25E	4490
13G10m	I	Elba-Almo Summit	29	14S	25E	5690
13H4sp	U	George Peak	4	13N	14W	9000
13G8m	I	Heglar	19	11S	28E	4590
13G1MP	I	Howell Canyon	2	13S	24E	8000
13G12m	I	Moulton	27	16S	23E	5950
13G14p	I	Near Almo	35	15S	24E	5200
13H1P	U	One Mile Summit	19	14N	14W	7330
13G5M	I	Sheep Hollow	4	14S	24E	6200
12G8M	I	Sublett	8	12S	30E	6000
12G9A	I	Summit Springs	15	13S	30E	5400

GOOSE - TRAPPER CREEK						
14G3M	I	Badger Gulch	24	15S	19E	6660
14G1AP	I	Bostetter Ranger Station	35	14S	19E	7500
14G7m	I	Trapper Creek	2	15S	20E	5300
13H3ap	U	Vi Pont	17	14N	17W	7670

SALMON FALLS CREEK						
14G5A	I	Cedar Creek	25	15S	13E	000
14G4M	I	Deadline	25	14S	18E	6900
15H13A	N	Goat Creek	31	46N	60E	8800
14H1	N	Jakes Creek	6	42N	62E	7000
14G2	I	Magic Mountain	14	14S	18E	6700
15G1m	I	Patrick Ranch	23	15S	12E	5720
15H18a	N	Red Point	15	47N	61E	7940
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2a	I	Wilson Creek	24	16S	12E	7500

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
BRUNEAU RIVER						
15H1MAP	N	Bear Creek	31	46N	58E	7800
15G3p	I	Cat Creek Airport	9	16S	6E	5700
15H2	N	Fox Creek	33	46N	58E	6800
15H15A	N	Hummingbird Springs	6	45N	60E	8945
15H14MP	N	Pole Creek Ranger Station	13	46N	59E	8330
15G4p	I	Sailor Creek Divide	21	10S	10E	4350

OWYHEE RIVER						
16G6	I	Antelope Ridge	20	8S	1E	5900
18F5	O	Barren Valley	26	17S	38E	4200
16G9a	I	Battle Creek	10	11S	1E	5700
15H4M	N	Big Bend	30	45N	56E	6700
17G2m	O	Blue Mountain Pass (Basque)	4	38S	42E	5290
16G10a	I	Bull Basin	19	12S	5W	5600
18G3m	O	Folly Farm Summit	8	30S	38E	4450
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
16G5a	I	Hyde Pasture	SE 1/4 31	8S	2W	5800
16H4	N	Jacks Peak	28	42N	53E	8420
17G3m	O	Jordan Valley	2	30S	46E	4390
16H5	N	Laurel Draw	20	45N	53E	6700
17G4a	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	18	42N	53E	6800
16G7MP	I	Mud Flat	34	9S	2W	5500
17G5a	O	Oregon Canyon	9	40S	40E	6950
17H6a	N	Quinn Ridge	9	47N	41E	6300
16G11ap	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3AP	I	Silver City	6	5S	3W	6400
16G1PS	I	South Mountain	35	7S	5W	6340
16F6a	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
16G4MA	I	Triangle	N 1/2 35	7S	3W	5150
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12a	I	Vaught Ranch	10	11S	1W	5950
16G13a	I	War Eagle	20	5S	3W	7700

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
NAME	ELEVATION	DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
<u>RAFT RIVER</u>							
Conner Pass	5700	36	9.8	1/31	8.8	--	8.1
Howell Canyon	8000	48	11.5	1/31	6.9	9.2	7.3
Sublett	6000	36	7.0	1/28	5.4	6.1	5.7
<u>GOOSE CREEK</u>							
Badger Gulch	6660	36	7.0	1/27	6.4	6.9	6.0
<u>SALMON FALLS CREEK</u>							
Deadline	6900	36	7.4	12/27	5.9 ^j	7.3	6.2
Patrick Ranch	5720	36	7.7	1/27	6.7	6.8	6.7
Pole Creek R. S.	8330	48	9.7	1/27	8.0	6.9	5.2
<u>OWYHEE RIVER</u>							
Mud Flat	5500	48	12.8	1/26	13.8	14.0	14.4
j January Measurement							

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ⁶

UPPER SNAKE RIVER BASINCAMAS-BEAVER CREEKS

Camp Creek	6800	1/28	34	9.3	12.9	6.3
Kilgore	6200	1/31	35	10.5	14.2	6.2

MEDICINE LODGE CREEK

Irving Creek	7035	1/25	28	5.6	7.0	3.5*
Webber Creek	6700	1/25	31	6.3	6.9	3.2*

HENRYS FORK RIVER

Big Springs	6500	1/28	67	20.7	22.3	13.1
Black Canyon	7850	1/27	98	32.2	32.0	23.1*
Black Moose	8125	1/27	113	38.8	40.8	26.8*
Grassy Lake	7230	2/1	99	33.1	34.7	21.9
Island Park	6315	1/28	54	15.9	18.2	10.6
Latham Springs	7650	1/27	94	31.2	34.4	22.4*
Lucky Dog	6900	1/27	75	24.0	27.6	16.8*
Old Road	7250	1/27	80	24.6	30.4	17.5*
Poacher's Cabin	8000	1/27	90	29.1	28.4	23.8*
Sawtelle Mountain	8715	1/28	91	29.4	36.0	--
Targhee Pass	7000	1/28	50	14.1	16.3	9.4*
Valley View	6500	1/28	54	16.9	17.9	10.3

TETON RIVER

Freds Mountain	8000	1/27	69	23.9	23.2	--
Pine Creek Pass	6750	1/27	55	17.3	14.0	10.5*
State Line	6400	1/27	53	16.2	12.3	9.0

WILLOW CREEK

Aspen Grove	6600	1/27	45	15.0	10.5	--
Birch Creek	6800	1/27	54	19.4	8.1	--
Bone	6200	1/25	32	10.1	7.5	--
Ozone	5800	1/25	5	1.9	0.0	--
Sheep Mountain II	6510	1/25	50	14.6	13.1	--
Tex Creek	6700	1/28	42	11.9	8.0	--

SAND CREEK

Henry Creek	5650	1/26	12	4.5	4.2	--
Taylor Mountain	6500	1/26	50	16.5	7.2	--

BLACKFOOT RIVER

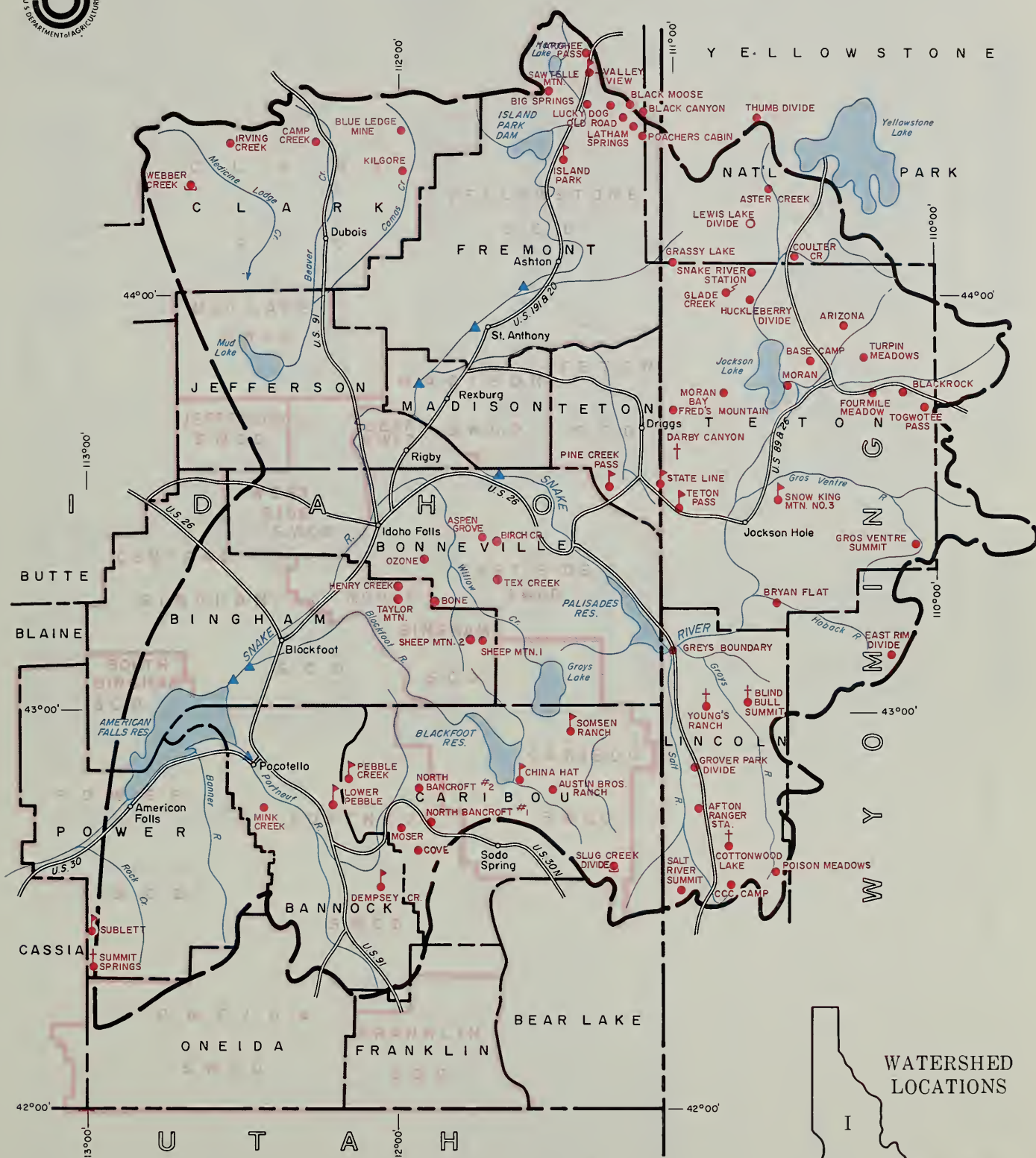
Austin Brothers Ranch	6450	2/1	34	10.6	8.8	5.1*
China Hat	6300	2/1	28	9.1	6.0	4.2*

(b) 1953-67, 15 year period. *Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

UPPER SNAKE RIVER BASIN



25 0 25 50
SCALE IN MILES



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- ▲ Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- † Aerial Snow Depth Gage
- ▶ Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- ⚡ Radio Telemetry

WATERSHED LOCATIONS



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
UPPER SNAKE RIVER BASIN						
SNAKE RIVER - WYOMING						
10G4	Wy	Afton Ranger Station	30	32N	118W	6200
10F1	Wy	Arizona	3	46N	115W	6850
10E8	Wy	Aster Creek	44° 17'	110° 38'		7700
10F2	Wy	Base Camp	20	46N	113W	6900
10F7	Wy	Blackrock	4	44N	111W	8600
10G2A	Wy	Blind Bull	6	34N	115W	8750
10F14	Wy	Bryan Flat	9	38N	115W	6250
10G7	Wy	CCC Camp	9	29N	118W	7500
10G5A	Wy	Cottonwood Lake	25	31N	118W	7500
10E10	Wy	Coulter Creek	44° 09'	110° 33'		7600
10F17MP	Wy	East Rim Divide #2	32	37N	111W	7950
10F6	Wy	Four Mile Meadows	35	45N	112W	7770
10E13	Wy	Glade Creek	12	48N	116W	7200
10F18	Wy	Greys Boundary	33	37N	118W	5800
10F19	Wy	Gros Ventre Summit	36	40N	111W	8750
10G3	Wy	Grover Park Divide	27	33N	118W	7500
10E14	Wy	Huckleberry Divide	32	48N	115W	7300
10E9PS	Wy	Lewis Lake Divide	44° 13'	110° 40'		7900
10F4MP	Wy	Moran	8 & 17	45N	114W	6800
10F3	Wy	Moran Bay	14	45N	116W	6800
10G6	Wy	Poison Meadows	29	30N	116W	8500
10G8P	Wy	Salt River Summit	32	29N	118W	7900
10E12MP	Wy	Snake River Station	9	48N	115W	6780
10F20M	Wy	Snow King Mountain #3	4	40N	117W	7600
10E7	Wy	Thumb Divide	44° 22'	110° 35'		7900
10F9MP	Wy	Togwotee Pass	29	44N	110W	9600
10F5	Wy	Turpin Meadows	14	45N	112W	6930
10G1A	Wy	Young's Ranch	26	34N	116W	6530

HENRYS FORK RIVER						
11E9	I	Big Springs	34	14N	44E	6500
11E18	I	Black Canyon	11	13N	45E	7850
11E19	I	Black Moose	33	14N	45E	8125
10E15	Wy	Grassy Lake	6	48N	117W	7230
11E10M	I	Island Park	29	13N	43E	6315
11E16	I	Latham Springs	9	13N	45E	7650
11E14	I	Lucky Dog	2	13N	45E	6900
11E15	I	Old Road	12	13N	44E	7250
11E17	I	Poacher's Cabin	11	13N	45E	8000
11E32	I	Sawtelle Mountain	7	14N	43E	8715
11E34	I	Targhee Pass	32	16N	44E	7000
11E8M	I	Valley View	7	15N	44E	6500

NO.	STATE	NAME	SEC. LAT.	TWP. OR AND	RGE. LONG.	ELEV.
TETON RIVER						
10F21a	Wy	Darby Canyon	28	43N	118W	8250
10F22	Wy	Freds Mountain	12	44N	118W	8000
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6400
10F13M	Wy	Teton Pass	24	41N	118W	8500
CAMAS - BEAVER CREEK						
11E11	I	Blue Ledge Mine	27	13N	38E	6700
12E3	I	Camp Creek	21	13N	36E	6800
11E12	I	Kilgore	6	12N	39E	6200
MEDICINE LODGE CREEK						
12E4	I	Irving Creek	20	13N	33E	7035
12E5	I	Webber Creek	23	12N	32E	6700
WILLOW CREEK						
11F10	I	Aspen Grove	35	2N	41E	6600
11F3	I	Birch Creek	36	2N	41E	6800
11F8	I	Bone	29	1S	40E	6200
11F4	I	Ozone	14	1N	39E	5800
11F9	I	Sheep Mountain I	33	2S	41E	6450
11F11	I	Sheep Mountain II	33	2S	41E	6510
11F5	I	Tex Creek	6	1S	42E	6700
SAND CREEK						
11F6	I	Henry Creek	7	1S	39E	5650
11F7	I	Taylor Mountain	19	1S	39E	6500
BLACKFOOT RIVER						
11G3	I	Austin Brothers Ranch	28	7S	43E	6450
11G2M	I	China Hat	17	7S	42E	6300
11G5P	I	Slug Creek Divide	15	10S	44E	7225
11G1M	I	Somsen Ranch	25	5S	43E	7000
PORTNEUF RIVER						
11G25	I	Cove	21	9S	39E	5525
12G5	I	Dempsey Creek	17	10S	38E	6280
12G6M	I	Lower Pebble	7	8S	38E	5800
12G1	I	Mink Creek	33	7S	34E	6300
11G24	I	Moser	20	8S	39E	5950
11G23	I	North Bancroft #1	15	8S	39E	5460
11G22	I	North Bancroft #2	27	7S	39E	5430
12G2M	I	Pebble Creek	34	7S	37E	6550

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average ^b
Slug Creek Divide	7225	1/26	53	15.3	17.0	9.9*
Somsen Ranch	7000	2/1	50	14.2	14.3	7.5*

PORTNEUF RIVER

Cove	5525	1/28	26	6.4	6.2	--
Dempsey Creek	6280	1/28	49	13.9	11.6	6.5*
Lower Pebble	5800	1/27	60	19.8	13.0	--
Mink Creek	6300	1/31	62	18.9	15.6	8.9*
Moser	5950	1/28	34	8.7	10.0	--
North Bancroft #1	5460	1/28	18	5.5	6.6	--
North Bancroft #2	5430	1/28	10	2.0	4.0	--
Pebble Creek	6550	1/27	54	16.7	14.8	8.6*

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
<u>HENRY'S FORK RIVER</u>							
Island Park	6315	48	9.9	1/28	8.2	8.3	7.6
Valley View	6500	48	13.3	1/28	7.0	Frozen	Frozen
<u>TETON RIVER</u>							
Pine Creek Pass	6750	48	13.3	1/27	11.1	11.8	11.3
State Line	6400	48	14.8	1/27	12.5	14.0	11.2
Teton Pass	8500	48	10.5	1/27	9.6	11.8	7.1
<u>PORTNEUF RIVER</u>							
Lower Pebble	5800	36	7.6	1/27	7.0	8.5	4.6
Pebble Creek	6550	48	7.2	1/27	6.9	5.5	4.0

(b) 1953-67, 15 year period. *Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average $\bar{6}$

GREAT BASINBEAR RIVER

Emigrant Summit	7350	1/26	77	24.5	27.4	14.2*
Emigration Canyon	6500	1/26	41	12.2	12.6	6.4*

Montpelier Creek

Giveout	6840	1/28	53	15.4	14.4	7.7*
Little Beaver	6970	1/28	66	19.6	16.4	9.8*
Lower Home Canyon	7500	1/27	52	14.9	16.5	--
Montpelier Creek	6570	1/28	41	10.9	9.1	5.3*
Whiskey Flat	6985	1/28	43	11.8	11.8	6.2*

Mink Creek

Christensen Ranch	5600	2/1	28	7.7	9.6	5.6*
Dry Basin (A)	7900	1/31	76	24.2	32.6	--
#Emigrant Summit	7350	1/26	77	24.5	27.4	14.2*
Horseshoe Basin (A)	8000	1/31	66	21.0	29.5	--
Liberty Spring (A)	8600	1/31	102	32.4	45.5	--
Strawberry Creek	5800	2/1	36	10.0	11.1	6.9*
Strawberry Mink Divide	6800	2/1	70	21.6	23.5	13.0*

Cub River

Cub River R. S.	5400	1/31	25	6.8	9.0	5.7*
Willow Flat	6100	1/31	44	15.6	16.9	9.4*

MALAD RIVER

Cliff Canyon	7200	1/27	52	15.2	9.1	--
Daniels Creek	6400	1/27	32	8.8	5.9	--
Dry Creek Flat	6350	1/28	33	9.9	10.0	4.5*
Lower Elkhorn	6850	1/31	54	16.5	13.8	--
Oxford Mountain	6800	1/28	42	11.6	10.1	5.6*
Upper Elkhorn	7100	1/31	67	20.2	18.9	--

SOIL MOISTURE

STATION		PROFILE (Inches)		SOIL MOISTURE (Inches)			
		DEPTH	CAPACITY	DATE	THIS YEAR	LAST YEAR	2 YEARS AGO
NAME	ELEVATION						
<u>BEAR RIVER</u>							
Emigrant Summit	7350	36	8.2	1/26	6.6	6.6	6.1
Strawberry Creek	5800	48	12.7	1/26	10.0	10.1	8.3
<u>Montpelier Creek</u>							
Jenson Ranch	6580	48	18.7	1/28	7.2	7.0	10.0

(b) 1953-67, 15 year period. #Not located directly on this drainage. * Estimated 1953-67, 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

GREAT BASIN

25 0 25 50
SCALE IN MILES



INDEX to SNOW COURSES

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
			LAT.	OR AND	LONG.	

GREAT BASIN

BEAR RIVER

10G11	Wy	Big Park	7	27N	117W	8700
11H13MP	U	Dry Bread Pond	19	8N	4E	8230
11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burt's-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	1S	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300

MONTPELIER CREEK

11G16	I	Giveout	35	11S	45E	6840
11G17m	I	Giveout Pass	2	12S	45E	7025
11G19m	I	Jenson Ranch	15	12S	45E	6580
11G20	I	Little Beaver	26	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7500
11G18	I	Montpelier Creek	22	12S	45E	6570
11G26	I	Upper Home Canyon	31	11S	45E	8500
11G21	I	Whiskey Flat	26	11S	45E	6985

MINK CREEK

11G11	I	Christensen Ranch	27	13S	41E	5600
11G14a	I	Dry Basin	30	13S	42E	7900
11G6MP	I	Emigrant Summit	21	12S	42E	7350
11G15a	I	Horseshoe Basin	31	13S	42E	8000
11G13A	I	Liberty Spring	7	13S	42E	8600
11G9M	I	Strawberry Creek	9	13S	41E	5800
11G10	I	Strawberry Mink Divide	14	13S	41E	6800

CUB RIVER

11G12	I	Cub River Ranger Station	5	15S	41E	5400
11G8S	I	Franklin Basin	1	16S	41E	8000
11G4P	I	Willow Flat	2	15S	41E	6100

MALAD RIVER

12G4	I	Dry Creek Flat	31	13S	37E	6350
12G11	I	Lower Elkhorn	30	12S	36E	6850
12G3	I	Oxford Mountain	32	13S	37E	6800
12G10	I	Upper Elkhorn	25	12S	35E	7100

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

Canada:

Department of Lands, Forests, and
Water Resources, British Columbia
Department of Resources and Development,
Water Resources Division

States:

Idaho State Department of Water Administration
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
Agriculture Research Service

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
Indian Service
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Boise Project Board of Control
Little Wood River Irrigation District
Jordan Valley Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Twin Lakes Irrigation Company
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control

PRIVATE CORPORATIONS

Amalgamated Sugar Company

*Other organizations and individuals furnish valuable information for
snow survey reports. Their cooperation is gratefully acknowledged.*

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